

AMENDMENTS TO THE SPECIFICATION:

Please replace the second paragraph on page 3 with the following amended paragraph:

In accordance with the present invention, this problem is solved by the features defined in ~~Claims 1 to 3 of methods described herein~~. A component or functional element produced by ~~this method the methods~~ is defined in ~~Claim 22 described herein~~.

Please replace the third paragraph on page 3 with the following amended paragraph:

The preferred embodiments are ~~the subject matters of the dependent Claims described herein~~.

Please replace the paragraph on page 5, line 21, and ending on page 6, line 38, with the following amended paragraph:

By subsequent annealing, preferably at normal pressure, the glass material is heated to a level higher than the vitrifying temperature thereof. Due to its then plastic properties, the glass material fills the apertures in the structured surface of the semiconductor substrate. The annealing interval and the annealing temperature must be so high that with the given relative pressure conditions between the pressure of the atmosphere in the annealing furnace and the pressure preserved in the recesses of the semiconductor substrate surface during the bonding process, the

glass material will flow into the recesses until a relief model of the semiconductor surface structure will be achieved. In other words, the surface of the glass material facing the structured surface of the semiconductor substrate is structured. The propulsive force against the viscous resistance of the plastic glass material mass is the negative pressure prevailing in the apertures, relative to the atmosphere in the annealing furnace. With an identical temperature and process time, the material characteristics of the glass substrate will take the predominant influence on the relief formation and precision of the moulding operation. Particularly the precise composition of the glass, such as the quantity and type of the doping agent (e.g. boron, phosphorous) take an influence on the viscous properties of the glass. Moreover, the moulding characteristics are dependent on the quality of the vacuum during the anodic bonding process.

Please replace the first full paragraph on page 6 with the following amended paragraph:

The flow of material may give rise to roughness on the glass substrate surface turned away from the semiconductor substrate. This roughness is created in particular when the glass substrate presents a small thickness relative to the structures on the semiconductor substrate that are to be moulded. The thicker the glass substrate, the smaller is the roughness created on the glass substrate surface turned away from the semiconductor substrate. This roughness may be removed by grinding and/or polishing processes if they are undesirable. If a separation of the processed glass substrate from the semiconductor substrate is

desired a standard etching process may be employed for separation of the processed glass substrate from the semiconductor substrate, wherein the silicon is completely removed by etching whilst while the glass matrix is retained. To this end various chemicals such as tetra methyl ammonium hydroxide (TMAH) or xenon difluoride (XeF_2) are appropriate.

Please replace the paragraph bridging pages 9-10 with the following amended paragraph:

(b) An adhesion-enhancing layer of a suitable metal such as tantalum is applied on the Si wafer. A further metal, e.g. tin, is then applied on this layer. Tin equally prevents the glass from adhering to the silicon. The separation of the two wafers can be achieved by mechanical means by heating the tin, or by removal of the metal layer by etching it out. The metal layer can have a melting point below the melting points of the substrates.